

AMENDMENTS TO THE CLAIMS

This listing of the claims replaces all prior versions, and listings of the claims in the application:

Claim 1. Cancelled.

2. (Currently Amended) A tracheal gas insufflation system comprising:
a patient circuit adapted to couple a ventilator to an airway of a patient;
an insufflation catheter having a proximal end portion located generally outside a
patient and a distal end portion adapted to be located in an airway of a patient for providing a
flow of insufflation gas to such a patient;
a source of insufflation gas; and
a flow control system coupled between the patient circuit, the insufflation
catheter, and the source of insufflation gas so as to control a flow of gas between the patient
circuit, the insufflation catheter, and the source of insufflation gas~~The system of claim 1, wherein~~
the flow control system includes a first selectively actuatable valve connected between the source
of insufflation gas, the insufflation catheter, and the patient circuit, wherein the first valve is
adapted to be arranged to:

- a) communicate the insufflation catheter with the source of insufflation gas and disconnect the patient circuit from the source of insufflation gas and the insufflation catheter in a first configuration,
- b) communicate the insufflation catheter with the patient circuit and disconnect the source of insufflation gas from the insufflation catheter and the patient circuit in a second configuration.

3. (Original) The system of claim 2, wherein the flow control system includes a servo-controlled valve adapted to control a flow of gas from the patient circuit to ambient atmosphere.

4. (Original) The system of claim 3, wherein the flow control system includes a flow sensor adapted to measure a flow of gas through the servo-controlled valve.

5. (Original) The system of claim 2, further comprising a master shut-off valve adapted to disconnect the source of insufflation gas from the insufflation catheter and the patient circuit.

6. (Currently Amended) The system of claim ~~4~~², further comprising a pressure sensor adapted to determine a pressure in the insufflation catheter.

7. (Currently Amended) A tracheal gas insufflation system comprising:
a patient circuit adapted to couple a ventilator to an airway of a patient;
an insufflation catheter having a proximal end portion located generally outside a
patient and a distal end portion adapted to be located in an airway of a patient for providing a
flow of insufflation gas to such a patient;
a source of insufflation gas; and
a flow control system coupled between the patient circuit, the insufflation
catheter, and the source of insufflation gas so as to control a flow of gas between the patient
circuit, the insufflation catheter, and the source of insufflation gas~~The system of claim 1, wherein~~
the flow control system includes a first selectively actuatable valve connected between the source of insufflation gas, the insufflation catheter, and the patient circuit, wherein the first valve is adapted to be arranged to:

- a) communicate the insufflation catheter with the source of insufflation gas and disconnect the patient circuit from the source of insufflation gas in a first configuration, or (TGI)
- b) communicate the source of insufflation gas with the patient circuit and disconnect the insufflation catheter from the patient circuit and the source of insufflation gas in a second configuration. (VENT)

8. (Original) The system of claim 7, further comprising a second selectively actuatable valve connected between the insufflation catheter and the patient circuit, wherein the second valve is adapted to communicate the insufflation catheter and the patient circuit responsive to the first valve being in the second configuration.

9. (Original) The system of claim 7, further comprising a master shut-off valve adapted to disconnect the source of insufflation gas from the insufflation catheter and the patient circuit.

Claim 10. Cancelled.

11. (Currently Amended) A method of providing an insufflation gas to a patient comprising:

providing a patient circuit adapted to couple a ventilator to an airway of a patient;
providing an insufflation catheter having a proximal end portion located generally outside a patient and a distal end portion adapted to be located in an airway of a patient for providing a flow of insufflation gas to such a patient;
providing a source of insufflation gas; and
controlling a flow of gas between the patient circuit, the insufflation catheter, and the source of insufflation gas~~The method of claim 10,~~ wherein controlling the flow of gas between the patient circuit, the insufflation catheter, and the source of insufflation gas includes:

a) communicating the insufflation catheter with the source of insufflation gas and disconnecting the patient circuit from the source of insufflation gas and the insufflation catheter in a first configuration, ~~(TGI)~~
b) communicating the insufflation catheter with the patient circuit and disconnecting the source of insufflation gas from the insufflation catheter and the patient circuit in a second configuration. ~~(VENT)~~

12. (Original) The method of claim 11, further comprising controlling a flow of gas from the patient circuit to ambient atmosphere.

13. (Original) The method of claim 12, further comprising measuring a flow of gas through from the patient circuit to the ambient atmosphere.

14. (Original) The method of claim 11, further comprising disconnecting the source of insufflation gas from the insufflation catheter and the patient circuit via a master shut-off valve.

15. (Currently Amended) The method of claim ~~11~~¹⁰, further comprising measuring a pressure in the insufflation catheter.

16. (Currently Amended) A ventilator and tracheal gas insufflation system comprising:

a housing;

a pressure generator disposed within the housing;

a patient circuit connector disposed on an exterior of the housing adapted to connect to a patient circuit;

an insufflation catheter connector disposed on the exterior of the housing adapted to connect to an insufflation catheter;

a first tube disposed in the housing and connecting an outlet of the pressure generator to the patient circuit connector;

a second tube disposed in the housing and connecting a source of insufflation gas to the insufflation catheter connector; and

a first flow control system operatively coupled to the first tube to control a flow of gas in the patient circuit; and

a second flow control system operatively coupled to the second tube to control a flow of insufflation gas in the insufflation catheter.

17. (Original) The system of claim 16, wherein the second flow control system is coupled between the first tube, the second tube, and such a source of insufflation gas so as to control a flow of gas between the patient circuit, the insufflation catheter, and the source of insufflation gas.

18. (Original) The system of claim 16, wherein the source of insufflation gas is the pressure generator.

19. (Original) The system of claim 16, further comprising:
an insufflation catheter connected to the insufflation catheter connector; and
a patient circuit connected to the patient circuit connector.

20. (Original) The system of claim 16, further comprising a sensor operatively coupled to the second tube to detect a characteristic associated with the flow of gas in the second tube.

Claims 21-23. (Cancelled).